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## IN THE CLAIMS:

1. (Currently Amended) A plasma etching method comprising: the steps of:

placing a sample on a sample stage arranged in a processing chamber;

supplying a processing gas toward the <u>a</u> center of the sample through <u>from</u> a

shower plate <u>from the associated with an</u> electrode arranged in opposed relation to
the sample stage, the shower plate being nearer to the sample stage than the
electrode and having processing gas supply holes;

generating a plasma plasma in the processing chamber;

applying RF power between the sample stage and the electrode and thus previding the for providing energy enabling charged particles in the plasma with the energy to enter the sample;

neutralizing the errant charged particles which have entered the electrode enter the processing gas supply holes from the plasma during a period of RF power, generated by the application of the RF power and which have entered the processing gas supply holes of the shower plate, by bombardment of the errant charged particles against an inner surface of the processing gas supply holes, the errant charged particles being other than the charged particles that have entered the sample; and

etching the sample using the plasma.

2. (Currently Amended) A plasma etching method according to claim 1, wherein the processing gas is supplied toward the center of the sample in such a

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manner that the surface of the shower plate is segmented into a plurality of areas, and the processing gas is supplied in the a same direction in each of the segmented areas.

- (Currently Amended) A plasma etching method according to claim 1, wherein the an interior of the processing chamber is maintained at a processing pressure of not higher than 10 Pa.
- 4. (Currently Amended) A plasma etching method for generating plasma a plasma in a processing chamber and etching a sample using the plasma, comprising: the steps of:

supplying a processing gas from a gas chamber formed between an electrode and a shower plate arranged on the which is arranged nearer to the sample, the electrode being in opposed relation to the sample;

maintaining the a processing pressure in the processing chamber at not higher than 10 Pa;

generating a plasma in a processing space formed between the sample and the electrode by a plasma generating means;

neutralizing the errant charged particles entering, attempting to enter from the plasma, a plasma to the gas chamber formed between the electrode and the shower plate, by causing the errant charged particles to be impinged upon an inner surface of gas supply holes of the shower plate; and

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etching the sample using the charged particles entering the sample from the plasma.

- 5. (Currently Amended) A plasma etching method for etching a sample under the <u>a</u> processing pressure of not higher than 10 Pa, wherein the <u>a</u> processing gas is supplied from a position not less than 30 mm and not more than one half of the <u>a</u> diameter of the sample in distance from the sample, toward the <u>a</u> center of the sample through processing gas supply holes having at an inclination angle (θ) to the <u>a</u> surface of the sample, smaller than tan<sup>-1</sup>(t/d), where t is the <u>a</u> thickness of the shower plate, and d is the <u>a</u> diameter of the <u>a</u> processing gas supply hole.
- 6. (New) A plasma etching method according to claim 1, wherein the bombardment of the errant charged particles against an inner surface of the processing gas supply holes is effected by inclination of the processing gas supply holes to eliminate or reduce an area of a perpendicular path through the shower plate.
- 7. (New) A plasma etching method according to claim 1, wherein the bombardment of the errant charged particles against an inner surface of the processing gas supply holes is effected by having processing gas supply holes formed by a first bore extending inward from a first major planar surface of the shower plate and a second bore extending inward from an opposing major planar surface of the shower plate such that the processing gas can flow between the first

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bore and second bore, where axes of the first bore and second bore are offset from one another to eliminate or reduce an area of a perpendicular path through the shower plate.

- 8. (New) A plasma etching method according to claim 1, wherein the bombardment of the errant charged particles against an inner surface of the processing gas supply holes is effected by application of a biasing magnetic field through the shower plate at least partially parallel to major planar surfaces of the shower plate, to bias travel of the errant charged particles into collision with the inner surface of the processing gas supply holes.
- 9. (New) A plasma etching method according to claim 4, wherein the causing of the errant charged particles to be impinged upon an inner surface of gas supply holes of the shower plate is effected by inclination of the processing gas supply holes to eliminate or reduce an area of a perpendicular path through the shower plate.
- 10. (New) A plasma etching method according to claim 4, wherein the causing of the errant charged particles to be impinged upon an inner surface of gas supply holes of the shower plate is effected by having processing gas supply holes formed by a first bore extending inward from a first major planar surface of the shower plate and a second bore extending inward from an opposing major planar surface of the shower plate such that the processing gas can flow between the first

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bore and second bore, where axes of the first bore and second bore are offset from one another to eliminate or reduce an area of a perpendicular path through the shower plate.

- 11. (New) A plasma etching method according to claim 4, wherein the causing of the errant charged particles to be impinged upon an inner surface of gas supply holes of the shower plate is effected by application of a biasing magnetic field through the shower plate at least partially parallel to major planar surfaces of the shower plate, to bias travel of the errant charged particles into collision with the inner surface of the processing gas supply holes.
- 12. (New) A plasma etching method according to claim 5, wherein inclination of the processing gas supply holes eliminates or reduces an area of a perpendicular path through the shower plate.
- 13. (New) A plasma etching method according to claim 5, wherein other processing gas supply holes are formed by a first bore extending inward from a first major planar surface of the shower plate and a second bore extending inward from an opposing major planar surface of the shower plate such that the processing gas can flow between the first bore and second bore, where axes of the first bore and second bore are offset from one another to eliminate or reduce an area of a perpendicular path through the shower plate.

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14. (New) A plasma etching method according to claim 5, comprising application of a biasing magnetic field through the shower plate at least partially parallel to major planar surfaces of the shower plate, to bias travel of the errant charged particles into collision with the inner surface of the processing gas supply holes.